APPENDIX A

STATUTORY PROVISIONS INVOLVED

47 U.S.C. § 153(29) Network element.—The term "network element" means a facility or equipment used in the provision of a telecommunications service. Such term also includes features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.

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47 U.S.C. § 251(d)(2) Access standards. In determining what network elements should be made available for purposes of subsection (c)(3), the Commission shall consider, at a minimum, whether—

(A) access to such network elements as are proprietary in nature is necessary; and

(B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

APPENDIX B

FIRST REPORT AND ORDER ¶¶ 516-528

516. We conclude that operations support systems and the information they contain fall squarely within the definition of "network element" and must be unbundled upon request under section 251(c)(3), as discussed below. Congress included in the definition of "network element" the terms "databases" and "information sufficient for billing and collection or used in the transmission, routing, *or other provision* of a telecommunications service." [1253] We believe that the inclusion of these terms in the definition of "network element" is a recognition that the massive operations support systems employed by incumbent LECs, and the information such systems maintain and update to administer telecommunications networks and services, represent a significant potential barrier to entry. It is these systems that determine, in large part, the speed and efficiency with which incumbent LECs can market, order, provision, and maintain telecommunications services and facilities. Thus, we agree with Ameritech that "[o]perational interfaces are essential to promote viable competitive entry." [1254]

517. Nondiscriminatory access to operations support systems functions can be viewed in at least three ways. First, operations support systems themselves can be characterized as "databases" or "facilit[ies] . . . used in the provision of a telecommunications service," and the functions performed by such systems can be characterized as "features, functions, and capabilities that are provided by means of such facilit[ies]." [1255] Second, the information contained in, and processed by operations support systems can be classified as "information sufficient for billing and

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[1253] 47 U.S.C. § 153(29) (emphasis added).

[1254] Ameritech July 10 *Ex Parte* at 5.

[1255] 47 U.S.C. § 153(29).

collection or used in the transmission, routing, or other provision of a telecommunications service." [1256] Third, nondiscriminatory access to the functions of operations support systems, which would include access to the information they contain, could be viewed as a "term or condition" of unbundling other network elements under section 251(c)(3), or resale under section 251(c)(4). Thus, we conclude that, under any of these interpretations, operations support systems functions are subject to the nondiscriminatory access duty imposed by section 251(c)(3), and the duty imposed by section 251(c)(4) to provide resale services under just, reasonable, and nondiscriminatory terms and conditions.

518. Much of the information maintained by these systems is critical to the ability of other carriers to compete with incumbent LECs using unbundled network elements or resold services. Without access to review, *inter alia*, available telephone numbers, service interval information, and maintenance histories, competing carriers would operate at a significant disadvantage with respect to the incumbent. Other information, such as the facilities and services assigned to a particular customer, is necessary to a competing carrier's ability to provision and offer competing services to incumbent LEC customers.[1257] Finally, if competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same time and manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory ac-

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[1256] *Id.*

[1257] For these reasons, it is most important that incumbent LECs, which currently own the overwhelming majority of local facilities in any market, provide this information to those new entrants who initially will rely to varying degrees on incumbent LEC facilities. *See e.g.*, AT&T comments at 33-34.

cess to these support systems functions, which would include access to the information such systems contain, is vital to creating opportunities for meaningful competition.

519. As noted in the comments above, several state commissions have ordered real-time access or have ongoing proceedings working to develop and implement it within their jurisdictions. The New York Commission, building on its pioneering experience with the Rochester Telephone "Open Market Plan," has facilitated a working group on electronic interfaces comprised of both incumbent LECs and potential competitors.[1258] The New York Commission focused on these issues in response to the frustrations and concerns of resellers in the Rochester market.[1259] In particular, AT&T alleged that it was "severely disadvantaged due to the fact that [Rochester Telephone] has failed to provide procedures for resellers to access [their] databases for on-line queries needed to perform basic service functions [such] as scheduling customer appointments." [1260] The New York Commission has concluded that wherever possible NYNEX will provide new entrants with real-time electronic access to its systems.[1261]

[1258] Order Declaring Resale Prohibitions Void and Establishing Tariff Terms, Case 94-C-0095, *et al.* (New York Commission June 25, 1996).

[1259] Order Declaring Resale Prohibitions Void and Establishing Tariff Terms, Case 94-C-0095, *et. al,* (New York Commission June 25, 1996). In New York proceeding, resellers argued that interfaces were as important to competition as the level of the wholesale discount. *Id.*

[1260] AT&T Communications of New York, Inc. Complaint, Petition for Declaratory Judgement and for Reconsideration of Opinion No. 94-25 New York Commission, page 12.

[1261] *Id.* at 13-14. The New York Commission operations working group has focused on five areas for implementation: (1) service ordering, (2) trouble administration, (3) credit and collection, (4) billing and usage detail, (5) local exchange company requirements. *Id.* at 13-17.

As another example, the Georgia Commission recently ordered BellSouth to provide electronic interfaces such that resellers have the same access to operations support systems and informational databases as BellSouth does, including interfaces for pre-ordering, ordering and provisioning, service trouble reporting, and customer daily usage.[1262] In testimony before the Georgia Commission, a BellSouth witness acknowledged that "[n]o one is happy, believe me, with a system that is not fully electronic."[1263] As noted above, Georgia ordered BellSouth to establish these interfaces within two months of its order (by July 15, 1996), but recently extended the deadline an additional month (to August 15th).[1264] Both the Illinois and Indiana Commissions ordered incumbent LECs immediately to provide to competitors access to operational interfaces at parity with those provided to their own retail customers, or submit plans with specific timetables for achieving such access.[1265] Several other states have passed laws or adopted rules ordering incumbent LECs to provide interfaces for access equal to that the incumbent provides itself.[1266] We recognize the lead taken by these states and

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[1262] *See* In Re Petition of AT&T for the Commission to Establish Resale Rules, Rates, Terms and Conditions and the Initial Unbundling of Services, Docket 6352, (Georgia Commission May 29, 1996).

[1263] *Id.*

[1264] Motion for Reconsideration in Docket No. 6352-U (Georgia Commission July 2, 1996).

[1265] In the Matter of the Investigation on the Commission's Own Motion into Any and All Matters Relating to Local Telephone Exchange Competition Within the State of Indiana, Cause No. 39983, Interim Order on Bundled Resale and Other Issues (Indiana Commissions July 1, 1996); *Illinois Wholesale Order.*

[1266] *See e.g.,* Texas Commission comments at 19; In the Matter of the Commission Investigation Relative to the Establishment of Local Exchange Competition and Other Competitive Issues, Case No. 95-845-TP-COI (Ohio Commission June 12, 1996); Order Instituting Rulemaking on the Commission's Own Motion into Competi-

others, and we generally rely upon their conclusions in this Order.

520. We conclude that providing nondiscriminatory access to operations support systems functions is technically feasible. Incumbent LECs today provide IXCs with different types of electronic ordering or trouble interfaces that demonstrate the feasibility of such access, and perhaps also provide a basis for adapting such interfaces for use between local service providers.[1267] Further, as discussed above, several incumbent LECs, including NYNEX and Bell Atlantic, are already testing and operating interfaces that support limited functions, and are developing the interfaces to support access to the remaining functions identified by most potential competitors.[1268] Some incumbent LECs acknowledge that nondiscriminatory access to operations support systems functions is technically feasible.[1269] Finally, several industry groups are actively establishing standards for inter-telecommunications company transactions.[1270]

521. Section 251(d)(2)(A) requires the Commission to consider whether "access to such network elements as are proprietary in nature is necessary."[1271] Incumbent LECs argue that there are proprietary interfaces used to access these databases and information. Parties seeking

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tion for Local Exchange Service, R. 95-04-043 and I. 95-04-044 (California Commission April 26, 1995).

[1267] *See, e.g.*, Bell Atlantic June 21 *Ex Parte*; NYNEX July 12 *Ex Parte*; NYNEX July 17 *Ex Parte*; U S West June 28 *Ex Parte*; U S West July 9 *Ex Parte*.

[1268] Bell Atlantic June 21 *Ex Parte*; NYNEX July 17 *Ex Parte*.

[1269] *See* NYNEX reply at 33-34; GTE reply at 23 n.28; Bell Atlantic reply at 14.

[1270] Industry standards committees include ECIC, EDI, OBF and T1M1. *See* Ameritech July 10 *Ex Parte*, Sprint June 25 *Ex Parte*, NYNEX July 17 *Ex Parte*.

[1271] 47 U.S.C. § 251(d)(2)(A).

to compete with incumbent LECs counter that access to such databases and information is vitally important to the ability to broadly compete with the incumbent. As discussed above, competitors also argue that such access is necessary to order, provision, and maintain unbundled network elements and resold services, and to market competing services effectively to an incumbent LEC's customers. We find that it is absolutely necessary for competitive carriers to have access to operations support systems functions in order to successfully enter the local service market.

522. Section 251(d)(2)(B) requires the Commission to consider whether "the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." [1272] As mentioned above, parties identified access to operations support systems functions as critical to the provision of local service. We find that such operations support systems functions are essential to the ability of competitors to provide services in a fully competitive local service market. Therefore, we conclude that competitors' ability to provide service successfully would be significantly impaired if they did not have access to incumbent LECs' operations support systems functions.

523. We thus conclude that an incumbent LEC must provide nondiscriminatory access to their operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing available to the LEC itself.[1273] Such nondiscriminatory access necessar-

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[1272] 47 U.S.C. § 251(d)(2)(B).

[1273] We adopt the definition of these terms as set forth in the *AT&T-Bell Atlantic Joint Ex Parte* as the minimum necessary for our requirements. We note, however, that individual incumbent LEC's operations support systems may not clearly mirror these definitions. Nevertheless, incumbent LECs must provide nondiscriminatory access to the full range of functions within pre-

ily includes access to the functionality of any internal gateway systems [1274] the incumbent employs in performing the above functions for its own customers. For example, to the extent that customer service representatives of the incumbent have access to available telephone numbers or service interval information during customer contacts, the incumbent must provide the same access to competing providers. Obviously, an incumbent that provisions network resources electronically does not discharge its obligation under section 251(c)(3) by offering competing providers access that involves human intervention, such as facsimile-based ordering.[1275]

524. We recognize that, although technically feasible, providing nondiscriminatory access to operations support systems functions may require some modifications to existing systems necessary to accommodate such access by competing providers.[1276] Although, as discussed above, many incumbent LECs are actively developing these systems, even the largest and most advanced incumbent LECs have not completed interfaces that provide such access to all of their support systems functions. State commissions such as Georgia, Illinois, and Indiana, however, have ordered that such access be made available to requesting carriers in the near term. As a practical matter, the interfaces developed by incumbents to accommodate nondis-

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ordering, ordering, provisioning, maintenance and repair and billing enjoyed by the incumbent LEC.

[1274] A gateway system refers to any electronic interface the incumbent LEC has created for its own use in accessing support systems for providing pre-ordering, ordering, provisioning, repair and maintenance, and billing.

[1275] Such access was all that Rochester Telephone provided to AT&T, when AT&T attempted to compete as a reseller of Rochester Telephone service. *See* Letter from Bruce Cox, Government Affairs Director, AT&T to William Caton, Acting Secretary, FCC, July 10, 1996 (AT&T July 10 *Ex Parte*).

[1276] *See supra*, Section V.G. regarding accommodation of unbundling.

criminatory access will likely provide such access for services and elements beyond a particular state's boundaries, and thus we believe that requirements for such access by a small number of states representing a cross-section of the country will quickly lead to incumbents providing access in all regions.

525. In all cases, however, we conclude that in order to comply fully with section 251(c)(3) an incumbent LEC must provide, upon request, nondiscriminatory access to operations support systems functions for preordering, ordering, provisioning, maintenance and repair, and billing of unbundled network elements under section 251(c)(3) and resold services under section 251(c)(4). Incumbent LECs that currently do not comply with this requirement of section 251(c)(3) must do so as expeditiously as possible, but in any event no later than January 1, 1997.[1277] We believe that the record demonstrates that incumbent LECs and several national standards-setting organizations have made significant progress in developing such access. This progress is also reflected in a number of states requiring competitor access to these transactional functions in the near term. Thus, we believe that it is reasonable to expect that by January 1, 1997, new entrants will be able to compete for end user customers by obtaining nondiscrimniatory access to operations support systems functions.

526. We have considered the economic impact of our rules in this section on small incumbent LECs. For example, RTC urges us to recognize the differences between carriers in regards to computerized network administration and operational interfaces. Our requirement of nondiscriminatory access to operations support systems recognizes that different incumbent LECs possess different existing systems. We also note, however, that section

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[1277] *See infra*, Section VII.B. for a discussion of exemptions and suspensions for small and rural incumbent LECs.

251(f) of the 1996 Act provides relief for certain small LECs from our regulations implementing section 251.

527. Ideally, each incumbent LEC would provide access to support systems through a nationally standardized gateway. Such national standards would eliminate the need for new entrants to develop multiple interface systems, one for each incumbent. We believe that the progress made by standards-setting organizations to date evidences a strong national movement toward such a uniform standard.[1278] For example, both AT&T and Bell Atlantic agree that, given appropriate guidance from the Commission, the industry can achieve consensus on national standards such that within 12 months 95% of all inter-telecommunications company transactions may be processed via nationally standardized electronic gateways.[1279]

528. In order to ensure continued progress in establishing national standards, we propose to monitor closely the progress of industry organizations as they implement the rules adopted in this proceeding. Depending upon the progress made, we will make a determination in the near future as to whether our obligations under the 1996 Act require us to issue a separate notice of proposed rulemaking or take other action to guide industry efforts at arriving at appropriate national standards for access to operations support systems.

[1278] *See* Sprint June 25 *Ex Parte;* AT&T comments at 38; BellSouth reply at 27.

[1279] *AT&T-Bell Atlantic Joint Ex Parte.*